

## APPLICATIONS

- ✓ Multiple I/O Port Protection
- ✓ Board Level Interface Connection
- ✓ RS-232, RS-422 & RS-423
- ✓ Portable Electronics

## IEC COMPATIBILITY (EN61000-4)

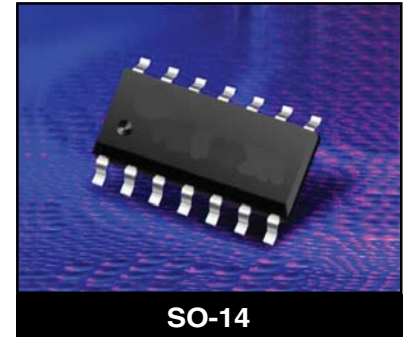
- ✓ 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- ✓ 61000-4-4 (EFT): 40A - 5/50ns
- ✓ 61000-4-5 (Surge): 12A, 8/20 $\mu$ s - Level 1(Line-Gnd) & Level 2(Line-Line)

## FEATURES

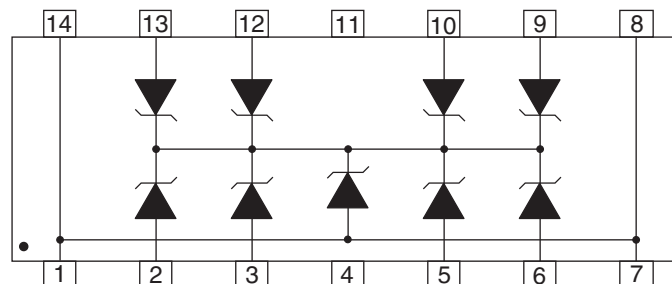
- ✓ 450 Watts Peak Pulse Power per Line (tp=8/20 $\mu$ s)
- ✓ Bidirectional Configurations
- ✓ Monolithic Design
- ✓ Design for I/O Protection
- ✓ Available in Voltage Types Ranging From: 5V to 24V
- ✓ Protects Up to Eight(8) Lines
- ✓ ESD Protection > 40 kilovolts
- ✓ RoHS Compliant

## MECHANICAL CHARACTERISTICS

- ✓ Molded JEDEC SO-14 Package
- ✓ Weight 0.15 grams (Approximate)
- ✓ Available in Lead-Free Pure-Tin Plating(Annealed)
- ✓ Solder Reflow Temperature:  
Pure-Tin - Sn, 100: 260-270°C
- ✓ Consult Factory for Leaded Device Availability
- ✓ Flammability Rating UL 94V-0
- ✓ 16mm Tape and Reel Per EIA Standard 481
- ✓ Marking: Logo, Part Number, Date Code & Pin One Defined By Dot on Top of Package



## PIN CONFIGURATION



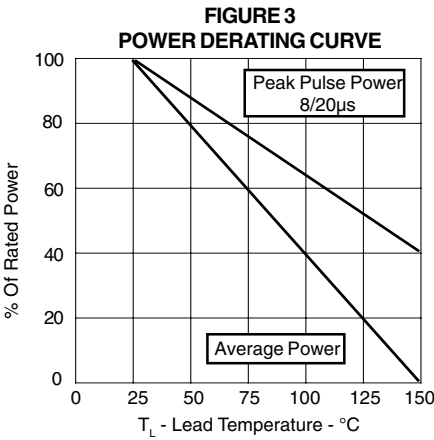
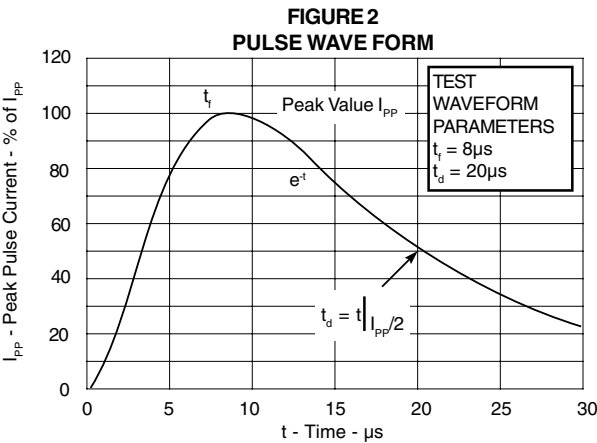
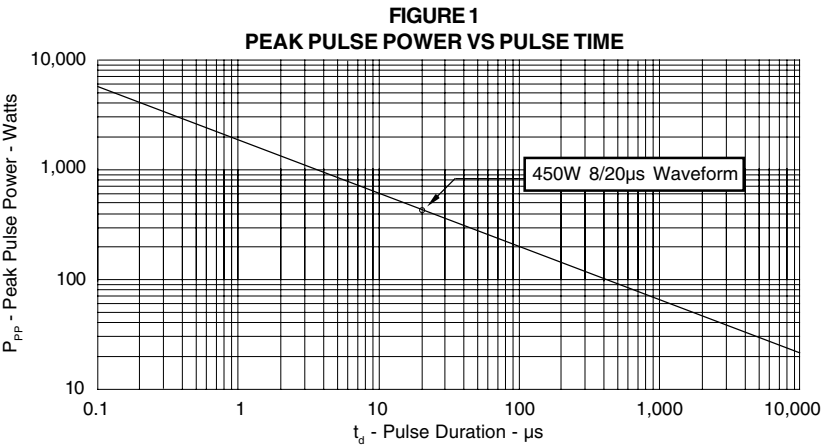
# PSMDA05C-8 thru PSMDA24C-8

## DEVICE CHARACTERISTICS

| MAXIMUM RATINGS @ 25°C Unless Otherwise Specified     |           |            |       |
|-------------------------------------------------------|-----------|------------|-------|
| PARAMETER                                             | SYMBOL    | VALUE      | UNITS |
| Peak Pulse Power ( $t_p = 8/20\mu s$ ) - See Figure 1 | $P_{PP}$  | 450        | Watts |
| Operating Temperature                                 | $T_L$     | -55 to 150 | °C    |
| Storage Temperature                                   | $T_{STG}$ | -55 to 150 | °C    |

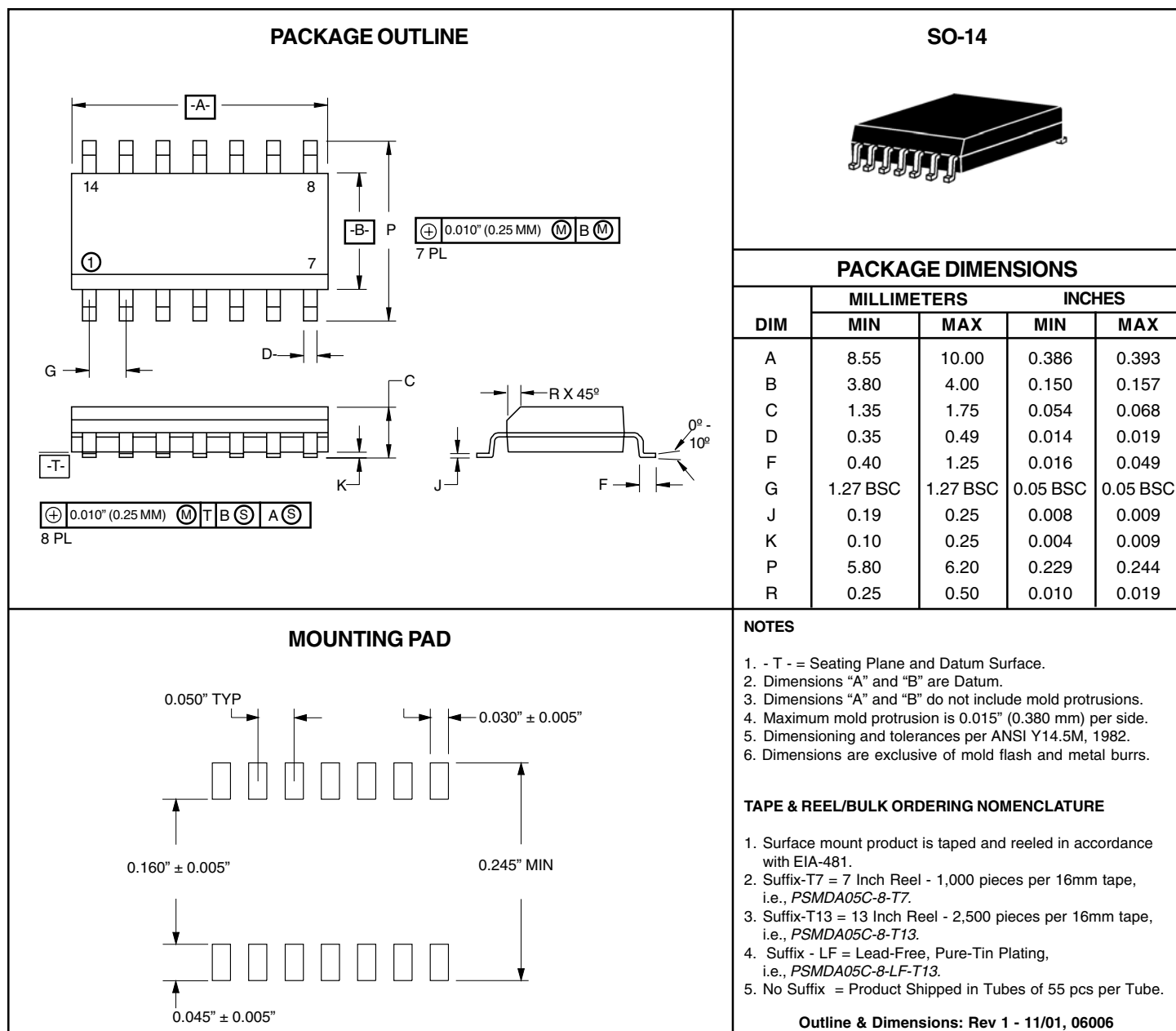
| ELECTRICAL CHARACTERISTICS PER LINE @ 25°C Unless Otherwise Specified |                     |                                                    |                                                               |                                                                             |                                                                                 |                                                               |                                                            |
|-----------------------------------------------------------------------|---------------------|----------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------|
| PART NUMBER                                                           | DEVICE MARKING CODE | RATED STAND-OFF VOLTAGE<br><br>@ $V_{WM}$<br>VOLTS | MINIMUM BREAKDOWN VOLTAGE<br><br>@ 1mA<br>$V_{(BR)}$<br>VOLTS | MAXIMUM CLAMPING VOLTAGE (See Fig. 2)<br><br>@ $I_p = 1A$<br>$V_C$<br>VOLTS | MAXIMUM CLAMPING VOLTAGE (See Fig. 2)<br><br>@ 8/20 $\mu s$<br>$V_C$ @ $I_{PP}$ | MAXIMUM LEAKAGE CURRENT<br><br>@ $V_{WM}$<br>$I_D$<br>$\mu A$ | MAXIMUM CAPACITANCE PER LINE<br><br>@ 0V, 1 MHz<br>C<br>pF |
| PSMDA05C-8                                                            | SEB                 | 5.0                                                | 6.0                                                           | 9.8                                                                         | 15.4V @ 30A                                                                     | 100                                                           | 350                                                        |
| PSMDA12C-8                                                            | SED                 | 12.0                                               | 13.4                                                          | 19.0                                                                        | 26.4V @ 17A                                                                     | 1                                                             | 150                                                        |
| PSMDA15C-8                                                            | SEF                 | 15.0                                               | 16.7                                                          | 24.0                                                                        | 32.4V @ 14A                                                                     | 1                                                             | 120                                                        |
| PSMDA24C-8                                                            | SEH                 | 24.0                                               | 26.7                                                          | 40.0                                                                        | 45.0V @ 10A                                                                     | 1                                                             | 100                                                        |

GRAPHS



# PSMDA05C-8 thru PSMDA24C-8

## SO-14 PACKAGE OUTLINE & DIMENSIONS



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